



6CF6

## SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

6CF6

## GENERAL DATA

## Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . . 6.3  $\pm$  10% volts

Current . . . . . 0.3 amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>o</sup></i>	
Grid No.1 to plate. . . . .	0.025 max.	0.015 max.	$\mu$ f
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater. . . . .	6.5	6.5	$\mu$ f
Plate to cathode & grid No. 3 & internal shield, grid No.2, and heater . .	2	3	$\mu$ f

Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . . .	125	volts
Grid No.3 . . . . .	Connected to cathode at socket	
Grid-No.2 Supply Voltage. . . . .	125	volts
Cathode Resistor. . . . .	56	ohms
Plate Resistance (Approx.). . . . .	0.3	megohm
Transconductance. . . . .	7800	$\mu$ mhos
Plate Current . . . . .	12.5	ma
Grid-No.2 Current . . . . .	3.7	ma
Grid-No.1 Voltage (Approx.) for plate $\mu$ a = 20 . . . . .	-6	volts
Grid-No.1 Voltage (Approx.) for plate ma. = 2.2, and cathode resistor (ohms) = 0 . . . . .	-3	volts

## Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-1/8"
Maximum Seated Length . . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	1-1/2" $\pm$ 3/32"
Diameter. . . . .	0.650" to 0.750"
Dimensional Outline . . . . .	See General Section
Bulb. . . . .	T5-1/2
Base. . . . .	Small-Button Miniature 7-Pin (JEDEC No.E7-1)

← Indicates a change.

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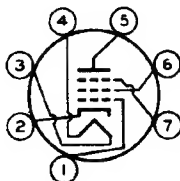


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## SHARP-CUTOFF PENTODE

Basing Designation for BOTTOM VIEW. . . . . 7CM

Pin 1-Grid No.1  
Pin 2-Cathode  
Pin 3-Heater  
Pin 4-Heater  
Pin 5-Plate



Pin 6-Grid No.2  
Pin 7-Grid No.3,  
Internal  
Shield

### AMPLIFIER — Class A<sub>1</sub>

#### → Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . . 330 max. volts  
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE . . 330 max. volts  
GRID-No.2 VOLTAGE. . . . . See Grid-No.2 Input  
*Rating Chart at front of Receiving Tube Section*  
GRID-No.1 (CONTROL-GRID) VOLTAGE:  
Positive-bias value. . . . . 0 max. volts  
GRID-No.2 INPUT:  
For grid-No.2 voltages up  
to 165 volts . . . . . 0.55 max. watt  
For grid-No.2 voltages be-  
tween 165 and 330 volts. . . . . See Grid-No.2 Input  
*Rating Chart at front of Receiving Tube Section*  
PLATE DISSIPATION. . . . . 2.3 max. watts  
PEAK HEATER-CATHODE VOLTAGE:  
Heater negative with respect to cathode. 200 max. volts  
Heater positive with respect to cathode. 200<sup>▲</sup> max. volts

<sup>0</sup> With external shield JEDEC No.316 connected to cathode.

<sup>▲</sup> The dc component must not exceed 100 volts.

→ Indicates a change.



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# AVERAGE PLATE CHARACTERISTICS

$E_f = 6.3$  VOLTS  
GRID N#3 CONNECTED TO  
CATHODE AT SOCKET.  
GRID-N#2 VOLTS=125

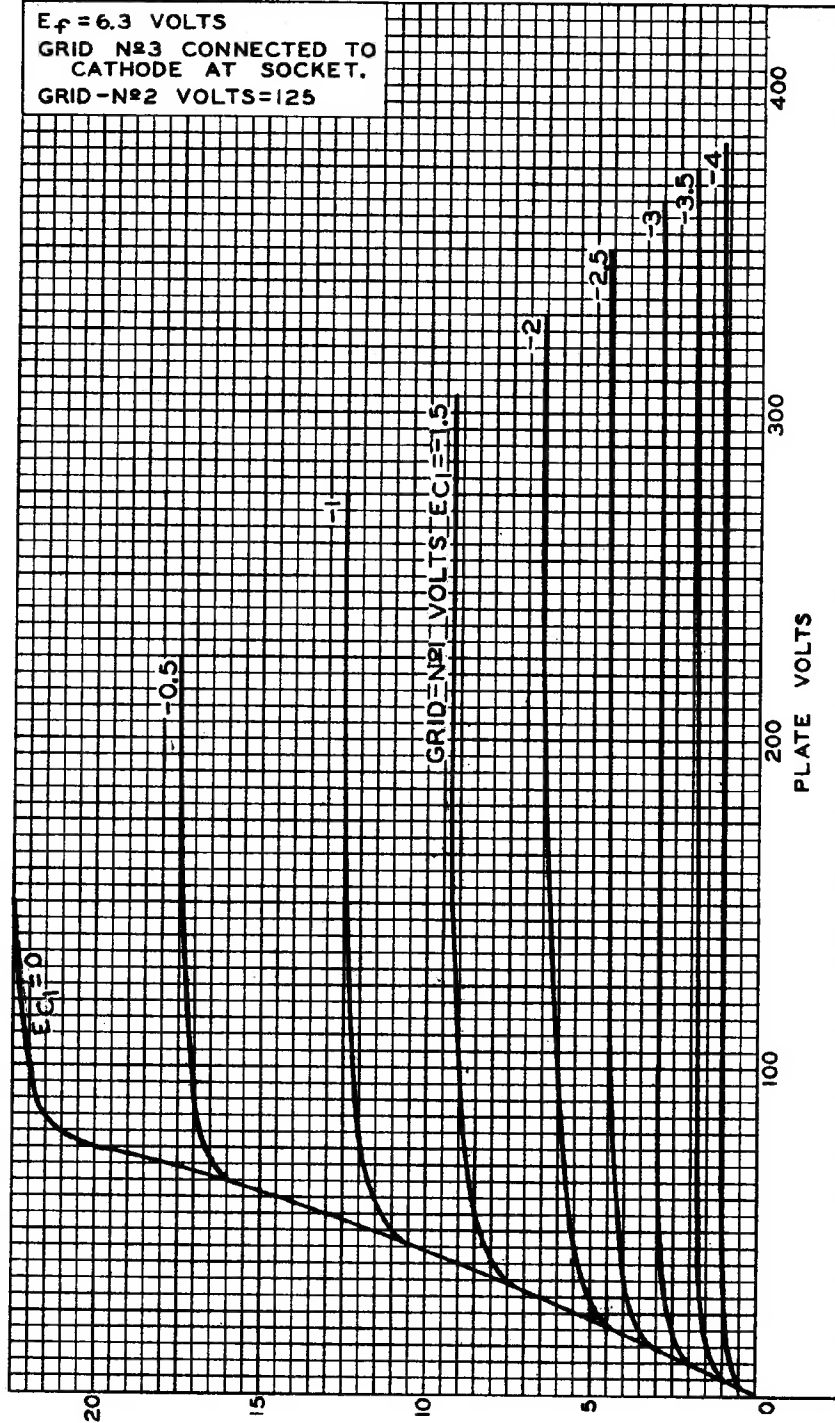


PLATE MILLIAMPERES

ELECTRON TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-1024.3

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# AVERAGE CHARACTERISTICS

